

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Accompanying Divisional Application under 37 CFR 1.53:

Prior Application: APPLICANTS: S. MATSUBARA et al
 Serial No. 09/360,686
 Filed: July 26, 1999

Group Art: 1761
Examiner: Bhat, N.
For: HANDLING METHOD OF BODY FLUID SAMPLE AND ANALYSIS
 APPARATUS USING THE SAME

PRELIMINARY AMENDMENT

Assistant Commissioner of Patents
Washington, D.C. 20231

Sir:

Prior to examination, please amend the above application
as follows.

IN THE CLAIMS

Please cancel claims 1-21 and add new claims 22-26 as set
forth below:

22. (New) A method of analyzing a body fluid sample
comprising the steps of sampling the body fluid sample
contained in a sample bottle using a pipette; transferring
said pipetted body fluid sample to another sample bottle; and

analyzing said transferred body fluid samples according to analysis items, wherein said method is characterized in that

when the same body fluid sample is analyzed on plural kinds of analysis items by pipetting the body fluid sample using a plurality of pipettes according to avoiding levels of carry-over between the pipetted body fluid samples, sample sampling using a pipette used for an analysis item having a higher avoiding level of carry-over is executed in prior to sample sampling using a pipette used for an analysis item having a lower avoiding level of carry-over.

23. (New) A method of analyzing a body fluid sample comprising the steps of sampling the body fluid sample contained in a sample bottle using a pipette; transferring said pipetted body fluid sample to another sample bottle; and analyzing said transferred body fluid sample according to an analysis item, said method comprising the steps of:

classifying said analysis items of the same body liquid sample according to avoiding levels of carry-over between said samples in advance, and differentiating a pipette used for an analysis item having a higher avoiding level of carry-over and a pipette used for an analysis item having a lower avoiding level of carry-over, and

executing sample sampling for the analysis item having the higher avoiding level of carry-over in prior to sample sampling for the analysis item having the lower avoiding level of carry-over.

24. (New) A method of analyzing a body fluid sample according to claim 22, wherein the analysis item having the higher avoiding level of carry-over is measurement of a label substance after an immune reaction of a substance in the sample to be measured with the label substance, and the analysis item having the lower avoiding level of carry-over is measurement of an optical characteristic of a reaction solution produced by a chemical reaction of the sample with a reagent.

25. (New) A method of analyzing a body fluid sample according to claim 22, wherein the analysis item having the higher avoiding level of carry-over is a DNA analysis, and the analysis item having the lower avoiding level of carry-over is a chemical analysis.

26. (New) A method of analyzing a body fluid sample according to claim 22, wherein a sampled body liquid sample


sampled by a pipette used for an analysis item having a higher avoiding level of carry-over is analyzed on the analysis item, and

if the result of judgment is that re-measurement for the analysis on the analysis item is not necessary, sample sampling by a pipette used for an analysis item having a lower avoiding level of carry-over.

REMARK

Early and favorable prosecution on the merits is respectfully requested.

Respectfully submitted,

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MARKED UP VERSION OF REWRITTEN CLAIMS

1. (Amended) [An analysis apparatus comprising

a first analysis unit for sampling a sample using a disposable nozzle tip,

a second analysis unit for sampling the sample using a repetitively used pipette nozzle,

a transportation means for transporting a specified sample to respective sampling position of said first and said second analysis unit, said specified sample being analyzed in said first and said second analysis units, and

a controller for controlling said transportation means so that said specified sample is moved to said sampling position of said first analysis unit before said specified sample is sampled at said second analysis unit, and said specified sample is moved to said sampling position of said second analysis unit after said specified sample is sampled at the sampling position at said first analysis unit.]

A method of analyzing a body fluid sample comprising the steps of sampling the body fluid sample contained in a sample bottle using a pipette; transferring said pipetted body fluid sample to another sample bottle; and analyzing said transferred body fluid samples according to analysis items, wherein said method is characterized in that

when the same body fluid sample is analyzed on plural kinds of analysis items by pipetting the body fluid sample using a plurality of pipettes according to avoiding levels of carry-over between the pipetted body fluid samples, sample sampling using a pipette used for an analysis item having a higher avoiding level of carry-over is executed in prior to sample sampling using a pipette used for an analysis item having a lower avoiding level of carry-over.

2. (Amended) [An analysis apparatus as defined in claim 1, wherein characterized by further comprising

a standby part for letting a sample stand by, said sample being already sampled at the first analysis unit and not being sampled at the second analysis unit yet, wherein

when measurement result of the specified sample obtained at said first analysis unit needs re-measurement of the specified sample, said controller transports said specified sample from said standby part to said sampling position of said first analysis unit in order to re-measure said specified sample, before moving said specified sample to said sampling position of said second analysis unit.]

A method of analyzing a body fluid sample comprising the steps of sampling the body fluid sample contained in a

sample bottle using a pipette; transferring said pipetted body fluid sample to another sample bottle; and analyzing said transferred body fluid sample according to an analysis item, said method comprising the steps of:

classifying said analysis items of the same body liquid sample according to avoiding levels of carry-over between said samples in advance, and differentiating a pipette used for an analysis item having a higher avoiding level of carry-over and a pipette used for an analysis item having a lower avoiding level of carry-over, and

executing sample sampling for the analysis item having the higher avoiding level of carry-over in prior to sample sampling for the analysis item having the lower avoiding level of carry-over.

3. (Amended) [An analysis apparatus as defined in claim 2, wherein characterized by further comprising

a storage means for storing a re-measurement logic for judging whether said re-measurement of the specified sample is needed, and

a selection means for automatically selecting whether to execute said re-measurement logic relating to analysis item of said specified sample.]

A method of analyzing a body fluid sample according to claim 1, wherein the analysis item having the higher avoiding level of carry-over is measurement of a label substance after an immune reaction of a substance in the sample to be measured with the label substance, and the analysis item having the lower avoiding level of carry-over is measurement of an optical characteristic of a reaction solution produced by a chemical reaction of the sample with a reagent.

4. (Amended) [An analysis apparatus as defined in claim 3, wherein characterized in that

said re-measurement logic judges contains conditions always to be executed, to be executed if being apart from a measurement range, and to be executed depending on difference between present measured value and former measured value of the specified sample of the same subject.]

A method of analyzing a body fluid sample according to claim 1, wherein the analysis item having the higher avoiding level of carry-over is a DNA analysis, and the analysis item having the lower avoiding level of carry-over is a chemical analysis.

5. (Amended) [An analysis apparatus as defined in claim 3, wherein characterized by further comprising

a storage means for storing a algorism for using a analysis channel for said re-measurement relating to the specified sample which is judged to need said re-measurement while said sample stands by part at said standby part, and

a selection means for selecting whether to use the same analysis channel as that used before said re-measurement relating to said analysis item of said specified sample.]

A method of analyzing a body fluid sample according to claim 1, wherein a sampled body liquid sample sampled by a pipette used for an analysis item having a higher avoiding level of carry-over is analyzed on the analysis item, and

if the result of judgment is that re-measurement for the analysis on the analysis item is not necessary, sample sampling by a pipette used for an analysis item having a lower avoiding level of carry-over.